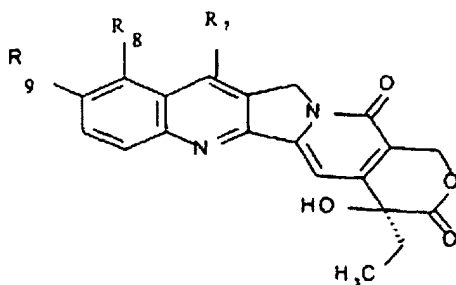


AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.-70. (Canceled).

71. (Currently Amended) A method of intracellular delivery into tumor cells of taxol or a camptothecin derivative of formula



wherein: R₇ is a -C(R₁₁)=N-O_(n)R₁₀ group, wherein R₁₀ is hydrogen or a C₁-C₅ alkyl or C₂-C₅ alkenyl group, linear or branched or C₃-C₁₀ cycloalkyl, group or a linear or branched (C₃-C₁₀) cycloalkyl - (C₁-C₅) alkyl group, or C₆-C₁₄ aryl, or a linear or branched (C₆-C₁₄) aryl - (C₁-C₅) alkyl group, or a heterocyclic or linear or branched heterocyclo - (C₁-C₅) alkyl group, said heterocyclic group containing at least a heteroatom selected from the group consisting of nitrogen atom, optionally substituted with a (C₁-C₅) alkyl group, and/or oxygen and/or sulfur; said alkyl, alkenyl, cycloalkyl, cycloalkylalkyl, aryl, aryl-alkyl, heterocyclic or heterocyclo-alkyl groups, being optionally substituted with other groups selected from the group consisting of: halogen, hydroxy, C₁-C₅ alkyl, C₁-C₅ alkoxy, phenyl, cyano, nitro, -NR₁₂R₁₃, wherein R₁₂ and R₁₃, which may be the same or different, are hydrogen, linear or branched (C₁-C₅) alkyl; a

pharmaceutically acceptable ester of the $-\text{COOH}$ group; or the $-\text{CONR}_{14}\text{R}_{15}$ group, wherein R_{14} and R_{15} , which may be the same or different, are hydrogen or linear or branched ($\text{C}_1\text{-C}_5$) alkyl; or

R_{10} is a ($\text{C}_6\text{-C}_{10}$) aroyl residue optionally substituted by one or more groups selected from the group consisting of: halogen, hydroxy, linear or branched ($\text{C}_1\text{-C}_5$) alkyl, $\text{C}_1\text{-C}_5$ alkoxy, phenyl, cyano, nitro, $-\text{NR}_{16}\text{R}_{17}$, wherein R_{16} and R_{17} , which may be the same or different, is hydrogen, linear or branched ($\text{C}_1\text{-C}_8$) alkyl;

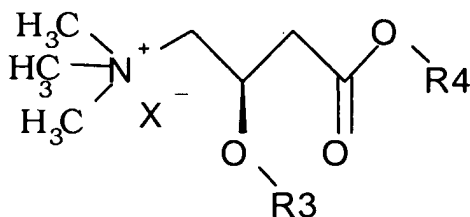
N is the number 0 or 1;

R_{11} is hydrogen, linear or branched $\text{C}_1\text{-C}_5$ alkyl, linear or branched $\text{C}_2\text{-C}_5$ alkenyl, $\text{C}_3\text{-C}_{10}$ cycloalkyl, ($\text{C}_3\text{-C}_{10}$) cycloalkyl - linear or branched ($\text{C}_1\text{-C}_5$) alkyl, $\text{C}_6\text{-C}_{14}$ aryl, ($\text{C}_6\text{-C}_{14}$) aryl - linear or branched alkyl ($\text{C}_1\text{-C}_5$);

R_8 and R_9 , which may be the same or different are hydrogen, hydroxy, linear or branched $\text{C}_1\text{-C}_5$ alkoxy;

their N_1 -oxides, their single isomers, in particular the syn and anti isomers of the $-\text{C}(\text{R}_{11})=\text{N}-\text{O}_{(n)}\text{R}_{10}$ group, their possible enantiomers, diastereoisomers and relative admixtures, the pharmaceutically acceptable salts thereof;

using a liposome ~~comprising~~ consisting of a compound of formula (II)



(II)

where:

R_3 is a saturated linear or branched acyl chain, with 4-26 carbon atoms;

R_4 is a saturated or unsaturated, linear or branched alkyl chain, with 4-26 carbon atoms;
and

X^- is the anion of a pharmacologically acceptable acid,

with the proviso that said liposome is not:

miristoyl L-carnitine chloride tetradecyl ester,

palmitoyl L-carnitine bromide hexadecyl ester,

oleyl L-carnitine chloride oleyl ester.

72. (Previously Presented) The method according to claim 71, in which R_3 is selected from the group consisting of nonanoyl, dodecanoyl, myristoyl, palmitoyl, stearoyl and oleoyl.

73. (Previously Presented) The method according to claim 71, in which R_4 is selected from the group consisting of nonyl, undecyl, tetradecyl, hexadecyl and oleyl.

74. (Previously Presented) The method according to claim 71, in which X^- is selected from the group consisting of chloride; bromide; iodide; aspartate; acid aspartate; citrate; acid citrate; tartrate; acid tartrate; phosphate; acid phosphate; fumarate; acid fumarate; glycerophosphate; glucose phosphate; lactate; maleate; acid maleate; mucate; orotate; oxalate; acid oxalate; sulphate; acid sulphate; trichloroacetate; trifluoroacetate; methane sulphonate; pamoate and acid pamoate.

75. (Currently Amended) The method according to claim 71, in which the ~~compound~~ in the compound of formula (II) is selected from the group consisting of palmitoyl L-carnitine chloride undecyl ester; stearoyl L-carnitine chloride undecyl ester; stearoyl L-carnitine chloride tetradecyl ester; palmitoyl L-carnitine chloride tetradecyl ester; myristoyl L-carnitine chloride tetradecyl ester; palmitoyl L-carnitine bromide hexadecyl ester, and oleoyl L-carnitine chloride oleyl ester.

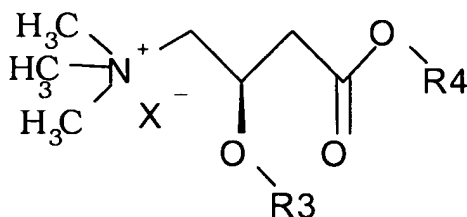
76. (Previously Presented) The method according to claim 71, in which said derivative of camptothecin is selected from the group consisting of 7-benzyloxyiminomethylcamptothecin and 7-butoxyiminomethylcamptothecin.

77. (Previously Presented) The method according to claim 71, in which the liposome additionally contains helper lipids.

78. (Previously Presented) The method according to claim 77, in which said helper lipid is selected from the group consisting of cholesterol, 1-palmitoyl-2-oleoyl phosphatidyl choline and dioleoyl phosphatidyl choline.

79.-85. (Canceled).

86. (Currently Amended) A composition ~~comprising~~consisting of a liposome comprising a compound of formula (II)



(II)

where:

R₃ is a saturated linear or branched acyl chain, with 4-26 carbon atoms;

R₄ is a saturated or unsaturated, linear or branched alkyl chain, with 4-26 carbon atoms;

with the proviso that said liposome is not:

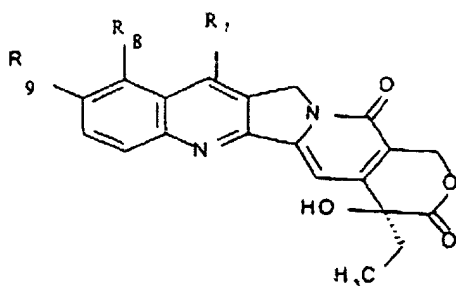
miristoyl L-carnitine chloride tetradecyl ester,

palmitoyl L-carnitine bromide hexadecyl ester,

oleyl L-carnitine chloride oleyl ester;

and

X^- is the anion of a pharmacologically acceptable acid, said liposome comprising taxol or a camptothecin derivative of formula



wherein: R₇ is a $-C(R_{11})=N-O_{(n)}R_{10}$ group, wherein R₁₀ is hydrogen or a C₁-C₅ alkyl or C₂-C₅ alkenyl group, linear or branched or C₃-C₁₀ cycloalkyl, group or a linear or branched (C₃-C₁₀) cycloalkyl - (C₁-C₅) alkyl group, or C₆-C₁₄ aryl, or a linear or branched (C₆-C₁₄) aryl - (C₁-C₅) alkyl group, or a heterocyclic or linear or branched heterocyclo - (C₁-C₅) alkyl group, said heterocyclic group containing at least a heteroatom selected from the group consisting of nitrogen atom, optionally substituted with a (C₁-C₅) alkyl group, and/or oxygen and/or sulfur; said alkyl, alkenyl, cycloalkyl, cycloalkylalkyl, aryl, aryl-alkyl, heterocyclic or heterocyclo-alkyl groups, being optionally substituted with other groups selected from the group consisting of: halogen, hydroxy, C₁-C₅ alkyl, C₁-C₅ alkoxy, phenyl, cyano, nitro, -NR₁₂R₁₃, wherein R₁₂ and R₁₃, which may be the same or different, are hydrogen, linear or branched (C₁-C₅) alkyl; a pharmaceutically acceptable ester of the -COOH group; or the -CONR₁₄R₁₅ group, wherein R₁₄ and R₁₅, which may be the same or different, are hydrogen or linear or branched (C₁-C₅) alkyl; or R₁₀ is a (C₆-C₁₀) aroyl residue optionally substituted by one or more groups selected from the group consisting of: halogen, hydroxy, linear or branched (C₁-C₅) alkyl, C₁-C₅ alkoxy,

phenyl, cyano, nitro, $-NR_{16}R_{17}$, wherein R_{16} and R_{17} , which may be the same or different, are hydrogen, linear or branched (C_1-C_8) alkyl;

n is the number 0 or 1;

R_{11} is hydrogen, linear or branched C_1-C_5 alkyl, linear or branched C_2-C_5 alkenyl, C_3-C_{10} cycloalkyl, (C_3-C_{10}) cycloalkyl - linear or branched (C_1-C_5) alkyl, C_6-C_{14} aryl, (C_6-C_{14}) aryl - linear or branched alkyl (C_1-C_5);

R_8 and R_9 , which may be the same or different is hydrogen, hydroxy, linear or branched C_1-C_5 alkoxy;

their N_1 -oxides, their single isomers, in particular the syn and anti isomers of the $C(R_{11})=N-O_{(n)}R_{10}$ group, their possible enantiomers, diastereoisomers and relative admixtures, the pharmaceutically acceptable salts thereof.

87. (Previously Presented) The composition according to claim 86, in which R_3 is selected from the group consisting of nonanoyl, dodecanoyl, myristoyl, palmitoyl, stearoyl and oleoyl.

88. (Previously Presented) The composition according to claim 86, in which R_4 is selected from the group consisting of nonyl, undecyl, tetradecyl, hexadecyl and oleyl.

89. (Previously Presented) The composition according to claim 86, in which $X-$ is selected from the group consisting of chloride; bromide; iodide; aspartate; acid aspartate; citrate; acid citrate; tartrate; acid tartrate; phosphate; acid phosphate; fumarate; acid fumarate; glycerophosphate; glucose phosphate; lactate; maleate; acid maleate; mucate; orotate; oxalate; acid oxalate; sulphate; acid sulphate; trichloroacetate; trifluoroacetate; methane sulphonate; pamoate and acid pamoate.

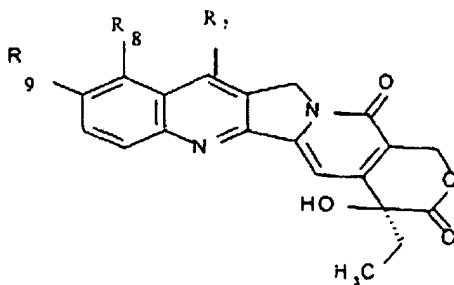
90. (Currently Amended) The composition according to claim 86, in which the compound of formula (II) is selected from the group consisting of: palmitoyl L-carnitine chloride undecyl ester; stearoyl L-carnitine chloride undecyl ester; stearoyl L-carnitine chloride tetradecyl ester; palmitoyl L-carnitine chloride tetradecyl ester; myristoyl L-carnitine chloride tetradecyl ester; palmitoyl L-carnitine bromide hexadecyl ester, and oleoyl L-carnitine chloride oleyl ester.

91. (Previously Presented) The composition according to claim 86, in which the liposome additionally contains helper lipids.

92. (Previously Presented) The composition according to claim 91, in which said helper lipid is selected from the group consisting of cholesterol, 1-palmitoyl-2-oleoyl phosphatidyl choline or dioleoyl phosphatidyl choline.

93. (Currently Amended) The composition according to claim 86, in which the composition is administered orally, parenterally, intravenously, intramuscularly, subcutaneously, transdermally or in the form of a nasal or mouth spray.

94. (Currently Amended) A method of transporting an antitumor drug to the target organ of a subject in need of antitumor treatment, wherein said drug is selected from the group consisting of taxol or a camptothecin derivative of formula



wherein: R_7 is a $-C(R_{11})=N-O_{(n)}R_{10}$ group, wherein R_{10} is hydrogen or a C_1 - C_5 alkyl or C_2 - C_5 alkenyl group, linear or branched or C_3 - C_{10} cycloalkyl, group or a linear or branched (C_3 - C_{10}) cycloalkyl - (C_1 - C_5) alkyl group, or C_6 - C_{14} aryl, or a linear or branched (C_6 - C_{14}) aryl - (C_1 - C_5) alkyl group, or a heterocyclic or linear or branched heterocyclo - (C_1 - C_5) alkyl group, said heterocyclic group containing at least a heteroatom selected from the group consisting of nitrogen atom, optionally substituted with a (C_1 - C_5) alkyl group, and/or oxygen and/or sulfur; said alkyl, alkenyl, cycloalkyl, cycloalkylalkyl, aryl, aryl-alkyl, heterocyclic or heterocyclo-alkyl groups, being optionally substituted with other groups selected from the group consisting of: halogen, hydroxy, C_1 - C_5 alkyl, C_1 - C_5 alkoxy, phenyl, cyano, nitro, $-NR_{12}R_{13}$, wherein R_{12} and R_{13} , which may be the same or different, are hydrogen, linear or branched (C_1 - C_5) alkyl; a pharmaceutically acceptable ester of the $-COOH$ group; or the $-CONR_{14}R_{15}$ group, wherein R_{14} and R_{15} , which may be the same or different, are hydrogen or linear or branched (C_1 - C_5) alkyl; or

R_{10} is a (C_6 - C_{10}) aroyl residue optionally substituted by one or more groups selected from the group consisting of: halogen, hydroxy, linear or branched (C_1 - C_5) alkyl, C_1 - C_5 alkoxy, phenyl, cyano, nitro, $-NR_{16}R_{17}$, wherein R_{16} and R_{17} , which may be the same or different, are hydrogen, linear or branched (C_1 - C_8) alkyl;

n is the number 0 or 1;

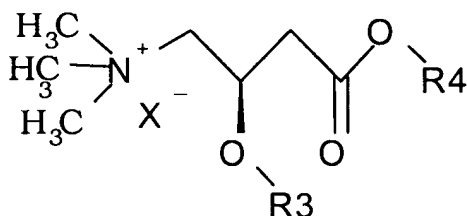
R_{11} is hydrogen, linear or branched C_1 - C_5 alkyl, linear or branched C_2 - C_5 alkenyl, C_3 - C_{10} cycloalkyl, (C_3 - C_{10}) cycloalkyl - linear or branched (C_1 - C_5) alkyl, C_6 - C_{14} aryl, (C_6 - C_{14}) aryl - linear or branched alkyl (C_1 - C_5);

R_8 and R_9 , which may be the same or different are hydrogen, hydroxy, linear or branched C_1 - C_5 alkoxy;

their N₁-oxides, their single isomers, in particular the syn and anti isomers of the-
C(R₁₁)=N-O_(n)R₁₀ group, their possible enantiomers, diastereoisomers and relative admixtures,
the pharmaceutically acceptable salts thereof;

said method comprising encapsulating said antitumor drug into a liposome

~~comprising~~ consisting of a compound of formula (II)



(II)

where:

R₃ is a saturated linear or branched acyl chain, with 4-26 carbon atoms;

R₄ is a saturated or unsaturated, linear or branched alkyl chain, with 4-26 carbon atoms;

and

X⁻ is the anion of a pharmacologically acceptable acid, to obtain a liposome containing
said antitumor drug,

with the proviso that said liposome is not:

miristoyl L-carnitine chloride tetradecyl ester,

palmitoyl L-carnitine bromide hexadecyl ester,

oleyl L-carnitine chloride oleyl ester;

and

administering said liposome to said subject.

95. (Previously Presented) The method according to claim 94, in which R_3 is selected from the group consisting of nonanoyl, dodecanoyl, myristoyl, palmitoyl, stearoyl and oleoyl.

96. (Previously Presented) The method according to claim 94, in which R_4 is selected from the group consisting of nonyl, undecyl, tetradecyl, hexadecyl and oleyl.

97. (Previously Presented) The method according to claim 94, in which X^- is selected from the group consisting of chloride; bromide; iodide; aspartate; acid aspartate; citrate; acid citrate; tartrate; acid tartrate; phosphate; acid phosphate; fumarate; acid fumarate; glycerophosphate; glucose phosphate; lactate; maleate; acid maleate; mucate; orotate; oxalate; acid oxalate; sulphate; acid sulphate; trichloroacetate; trifluoroacetate; methane sulphonate; pamoate and acid pamoate.

98. (Previously Presented) The method according to claim 94, in which the compound of formula (II) is selected from the group consisting of palmitoyl L-carnitine chloride undecyl ester; stearoyl L-carnitine chloride undecyl ester; stearoyl L-carnitine chloride tetradecyl ester; palmitoyl L-carnitine chloride tetradecyl ester; myristoyl L-carnitine chloride tetradecyl ester; palmitoyl L-carnitine bromide hexadecyl ester, and oleoyl L-carnitine chloride oleyl ester.

99. (Previously Presented) The method according to claim 94, in which said derivative of camptothecin is selected from the group consisting of 7-benzyloxyiminomethylcamptothecin or 7-butoxyiminomethylcamptothecin.

100. (Previously Presented) The method according to claim 94, in which the liposome additionally contains helper lipids.

101. (Previously Presented) The method according to claim 100, in which said helper lipid is selected from the group consisting of cholesterol, 1-palmitoyl-2-oleoyl phosphatidyl choline or dioleoyl phosphatidyl choline.

102. (Previously Presented) The method according to claim 94, wherein said antitumor drug is 7-butoxyiminomethylcamptothecin and said liposome comprises the compound palmitoyl L-carnitine undecyl ester.

103. (Previously Presented) The method according to claim 94, wherein said antitumor drug is taxol and said liposome comprises the compound palmitoyl L-carnitine undecyl ester.

104. (Previously Presented) The method according to claim 94, wherein said liposome is administered orally, parenterally, intravenously, intramuscularly, subcutaneously, transdermally or in the form of a nasal or mouth spray.

105. (Previously Presented) The method according to claim 94, wherein lungs are said target organ.

106. (Canceled).

107. (New) The method according to claim 71, wherein said liposome is in the form of a dry powder.

108. (New) The method according to claim 71, wherein said liposome is adsorbed on an inert support.

109. (New) The method according to claim 108, wherein the inert support is selected from the group consisting of sorbitol, threhalose and mannitol.

110. (New) The composition according to claim 86, wherein said liposome is in the form of a dry powder.

111. (New) The method according to claim 86, wherein said liposome is adsorbed on an inert support.

112. (New) The method according to claim 111, wherein the inert support is selected from the group consisting of sorbitol, threhalose, lactose and mannitol.

113. (New) The method according to claim 94, wherein said liposome is in the form of a dry powder.

114. (New) The method according to claim 94, wherein said liposome is adsorbed on an inert support.

115. (New) The method according to claim 114, wherein the inert support is selected from the group consisting of sorbitol, threhalose [vedi altri zuccheri negli esempi] and mannitol.